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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,885	04/13/2004	Christopher A. Merton	10408US01	4005

7590 03/25/2005

Attention: Eric D. Levinson
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Legal Affairs
P.O. Box 64898
St. Paul, MN 55164-0898

EXAMINER	
RESAN, STEVAN A	

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/822,885	MERTON, CHRISTOPHER A.	
	Examiner	Art Unit	
	Stevan A. Resan	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7-19-2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "large" in claims 10 and 11 is a relative term that renders the claims indefinite. The term "large" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims 10 and 11 also contain the term "primary ferromagnetic pigment". It is unclear what the word "primary" means in this context.

Claim 2 has coefficient of thermal expansion expressed in units of "ppm/C". There is no indication that this means per degree centigrade.

4. Claims 1-11 are directed to a magnetic recording medium. The phrase "for use with a magnetic recording head" is considered a statement of intended use and not a claim limitation. Dependent claims containing limitations to the magnetic head do not further limit the medium. Note that amendment to positively recite a combination of medium and head will subject the claims to restriction with election by original presentation to the medium.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukuda et al EP 1044788.

See [0010], [0032], [0055], [0060], [0061], Table 1 examples.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukuda et al EP 1044788 as applied to claim 1.

Tsukuda et al has been cited as above. Tsukuda et al do not exemplify a magnetic recording medium having a coefficient of thermal expansion of from about 5ppm/C to about 10 ppm/C and a Wyco surface roughness of less than 10 nm (as in claim 2) nor a coefficient of hygroscopic expansion as in claim 9.

However Tsukuda clearly teaches that the medium should be in these ranges. See [0019], [0023], [0021]. Therefore it would have been obvious to one of ordinary skill in the art to regulate within these ranges to optimize performance.

9. Claims 2, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukuda et al EP 1044788 in view of Yamaguchi et al US 4420532.

Tsukuda et al exemplifies a magnetic recording medium having a magnetic layer composition as in claims 10 and 11 [0055] except for the presence of aluminum oxide and a fatty acid ester lubricant and the non halogenated vinyl binder in claim 11.

However, the use of aluminum oxide in a magnetic layer as a head cleaning agent (HCA) with the use of a fatty acid ester in the magnetic layer as a lubricant in order to reduce the friction between a magnetic media and magnetic head is old in the art. Likewise the use on non-halogenated vinyl binder polymers is old in the art as for example the purpose of preventing corrosion of metal magnetic particles upon long term storage of the media. Yamaguchi et al is used for these teachings. See Col 2 lines 9-41 that lists equivalent abrasives and lubricants.

Therefore it would have been obvious to one of ordinary skill in the art to use these components for their art recognized function to optimize performance of the media.

Substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency.

In re Fount 213 USPQ 532 (CCPA 1982); In re Siebentritt 152 USPQ 618 (CCPA 1967): Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co. 85 USPQ 328 (USSC 1950).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEVAN A. RESAN
PRIMARY EXAMINER